

# UTP A 3545 Nb

TIG-rods for high-temperature cast alloys with high carbon content in the petrochemical industry

# Classifications

EN ISO 18274

S Ni Z (NiCr36Fe15Nb0.8)

## Characteristics and field of use

UTP A 3545 Nb is suitable for joining and surfacing on identical and similar high-heat-resistant cast alloys (centrifugal- and mould cast parts), such as GX-45NiCrNbSiTi45 35. The main application field is tubes and cast parts of reformer and pyrolysis ovens.

#### Properties of the weld metal

The weld deposit is applicable in low-sulphur, carbon-enriching atmosphere up to 1,175°C.

Typical analysis in %										
С	Si	Mn	Cr	Ni	Nb	Ti	Zr	Fe		
0.45	1.5	0.8	35.0	45.0	0.8	0.1	0.05	balance		

## Mechanical properties of the weld metal

Yield strength R <sub>p0,2</sub>	Tensile strength R <sub>m</sub>
MPa	MPa
450	550

## Welding instruction

Clean weld area thoroughly. No pre-heating or post weld heat treatment required. Keep heat input as low as possible and interpass temperature of max. 150°C.

Rod diameter x length [mm]	Current type	Shielding gas (EN ISO 14175)
2.0 x 1000	DC (-)	11
2.4 x 1000	DC (-)	11
3.2 x 1000	DC (-)	11